# MODIFICATION OF LAND APPLICATION PERMIT APPENDIX "B" TO PERMIT NO. LA-000007-02

Permittee Name: Magic West, Inc.

Effective Date of this Modification: June 27, 2002

#### **Complete Description of Modification**

The purpose of this Permit Modification is to allow the use of the existing 62-acre wastewater-land application site, by Magic West Inc. (MWI), through June 30, 2003 at the loading rates specified below. MWI will commence site closure activities on July 1, 2003. The Idaho Department of Environmental Quality (DEQ) and MWI will enter into a consent order, effective June 27, 2002, which covers site closure requirements and activities.

- 1. MWI agrees to operate the existing wastewater land application site from the date of signature of this Permit Modification until June 30, 2003 under the following terms and conditions:
  - A. Hydraulic loading limits
    - No greater than 75 million gallons of wastewater shall be applied annually and no greater than 6.25 million gallons of wastewater shall be applied per month.
  - B. Constituent loading limits
    - No greater than 800 pounds per acre of nitrogen shall be applied annually or 67 pounds per acre of nitrogen per month.
    - No greater than 7,250 pounds per acre of inorganic dissolved solids (total dissolved solids minus volatile dissolved solids) shall be applied annually or 604 pounds per acre of inorganic dissolved solids per month.
    - The monthly average COD loading rate shall be no greater than 85 pounds per acre per day.
    - No greater than 219 pounds per acre of phosphorus shall be applied annually or 18.25 pounds per acre of phosphorus per month.
    - Supplemental fertilizer applications will not be allowed throughout the duration of this Permit Modification.
  - C. Magic West Inc. shall grow and harvest a crop each year until the permit expires.
  - D. A grazing management plan must be submitted to DEQ for review and approval prior to any grazing activities.
  - E. Buffer Zone Requirements

Buffer zones from land application areas shall be provided as follows:

•	Dwellings	300 feet
•	Domestic Water Supplies	500 feet
•	On-site monitoring wells	50 feet
•	Public access areas	50 feet
•	Natural surface water bodies	100 feet
•	Man-made irrigation conveyances	50 feet

- Buffer zone distances may be reduced to alternative distances by employing DEQ approved mitigation measures including:
  - 1. Establishment of an effective physical barrier;
  - 2. utilization of "non-spray irrigation (drag tubes or equivalent apparatus);
  - 3. managing irrigation systems in a manner which would prevent any spray drift towards the buffered object; and/or
  - 4. run-off and/or over spray controls.
- All mitigation measures to reduce buffer zone distances must be submitted and approved by DEQ prior to use.
- BMP's to prevent runoff from the site shall be used in the buffer zones around all areas where runoff to surface water may occur. Berms and other BMP's shall be used to protect the well heads of all on-site wells.

#### F. Odor Management

An updated Odor Management Plan shall be included as part of the Operation and Maintenance Manual. MWI will be required to follow the Odor Management Plan and update it if nuisance odor conditions occur. MWI shall submit an updated Operation and Maintenance Manual to DEQ for review and approval by September 30, 2002.

#### G. Reporting Requirements

- MWI agrees to submit to DEQ an Annual Wastewater-Land Application Site Performance Report ("Annual Report") prepared by a competent environmental professional. The following Annual Reports will be required:
  - 1. Report for November 1, 2001 through October 31, 2002. Due January 31, 2003.
  - 2. Report for November 1, 2002 through June 30, 2003. Due August 31, 2003.
- The Annual Report shall include an interpretive discussion of monitoring data (ground water, soils, hydraulic loading, wastewater, etc.) with particular respect to environmental impacts by the facility. The Annual Report shall contain the results of the required monitoring as follows:

#### **Monitoring Requirements**

1.) Ten (10) soil sample locations shall be selected. Three (3) soil samples shall be collected at each sample

location, one at 0-12 inches, one at 12-24 inches, and one at 24-36 inches. The soil samples collected at each depth shall be composited to yield three (3) samples for analysis.

2.) Additional monitoring locations are defined in the table entitled, "Environmental Monitoring Serial Numbers".

Frequency	Monitoring Point	Description/Type of Monitoring	Parameters
Daily	Flow meter	Effluent wastewater quantity	Volume (million gallons and acre-inches), record monthly
Monthly	Effluent to land application	Effluent wastewater quality	Chemical Oxygen Demand, Total Kjeldahl Nitrogen, Ammonia-Nitrogen, Nitrite + Nitrate-Nitrogen, Total Phosphorous, Chloride, Electrical Conductivity, Potassium, pH
Quarterly	Effluent to land application	Wastewater quality into land application system	Total Dissolved Inorganic Solids (TDIS) - the summation of chemical concentration results for the following common ions (in mg/l): calcium, magnesium, potassium, sodium, chloride, sulfate, and 0.6 times alkalinity (alkalinity measured as calcium carbonate). Submit analysis of individual ions in addition to TDIS.
Quarterly	Effluent to land application	Wastewater quality into land application system	Total Dissolved Solids (TDS), Volatile Dissolved Solids (VDS)
Quarterly (Feb., May, Aug., and Nov.)	Three (3) groundwater-monitoring wells.	MW-1, MW-2, & MW-3	Chemical Oxygen Demand, Nitrate- Nitrogen, Total Phosphorous, Total Dissolved Solids, Water table elevation, Water table depth, Chloride, Sulfate, Total Iron, Dissolved Iron <sup>2</sup> , Total Manganese, Dissolved Manganese <sup>2</sup>
Twice per year (March and Nov.)	Soil monitoring unit	See monitoring requirement note 1	Electrical Conductivity, Nitrate-Nitrogen, Ammonium Nitrogen, Phosphorous (plant available), pH

**Monitoring Requirements (continued)** 

Frequency	Monitoring Point	Description/Type of Monitoring	Parameters
Monthly	Hydraulic management unit	Calculate wastewater loading rate	Inches and Million Gallons per month
	Hydraulic management unit	Calculate monthly average COD loading	COD monthly average in lbs./acre-day
	Hydraulic management unit	Calculate monthly nitrogen loading from wastewater application	Nitrogen applied in lbs./acre
	Hydraulic management unit	Calculate monthly phosphorous loading from wastewater application	Phosphorus applied in lbs./acre
	Hydraulic management unit	Monthly inorganic TDS loading rate (TDS-VDS)	Inorganic TDS in lbs./acre
Annually	Hydraulic management unit	Crop yield	Pounds/acre and total pounds (specify moisture basis)
	Hydraulic management unit	Calculate crop nitrogen, phosphorous, and ash removal	Nitrogen, phosphorus & ash removed, lbs./acre
	Hydraulic management unit	Plant tissue analysis: Composite sample of harvested portion.	Nitrate-nitrogen, total kjeldahl nitrogen, total phosphorus, ash (dry tons/acre)

<sup>(2)</sup> Analytical results are required for dissolved iron and/or manganese only if the results for total iron and/or manganese exceed the standards in IDAPA 58.01.11.200.01.b.

Environmental Monitoring Serial Numbers Computerized Data Reporting Serial Number Key

**SOIL MONITORING UNIT** 

Soil Monitoring Unit	Common Name	Associated Hydraulic Mgmt Unit
SU-000703	Land Treatment Site	MU-000701

- 2. MWI is solely responsible for the adequacy of all measures undertaken pursuant to this Permit Modification to meet the requirements of this Permit Modification; the attached Standard Permit Conditions; the Idaho Water Quality Standards and Wastewater Treatment Requirements IDAPA 58.01.02; and the Ground Water Quality Rule, IDAPA 58.01.11. This Permit Modification shall not release MWI from its continued obligation to fully comply with all applicable local, state, and federal laws, and regulations.
- 3. If any event occurs that causes, or may cause, delay in the achievement of any requirement of this Permit Modification, MWI shall notify DEQ in writing within ten (10) days of the date MWI knew, or reasonably should have known, of the delay. Any notice submitted pursuant to this paragraph shall describe in detail the anticipated length of the delay, all the anticipated consequences of the delay, measures taken by MWI to prevent or minimize the delay, and a timetable by which those measures will be implemented. MWI shall use all reasonable measures to avoid or minimize any such delay. If DEQ determines that the delay, or anticipated delay, in achieving any requirement of this Permit Modification has been, or will be, caused by circumstances beyond the reasonable control of MWI DEQ may grant an extension for a period equal to the length of the delay. The burden of proving that a delay is caused by circumstances beyond the reasonable control of MWI shall rest wholly with MWI.

4. All communications submitted to DEQ pursuant to this Permit Modification shall be addressed to:

Mr. Stephen E. West Regional Administrator Boise Regional Office Idaho Department of Environmental Quality 1445 N. Orchard Boise, ID 83706

5. All communications submitted by DEQ pursuant to this Permit Modification shall be addressed to:

Mr. Roger Jones Magic West, Inc. Edgewater Ranch Rt. 1 Box 117 Glenns Ferry, ID 83623

All Permit Modifications listed above supercede the like permit requirement in the existing permit. All other requirements will remain as specified in the permit LA-000007-02 issued to the MWI dated December 20, 1996 and signed January 6, 1997. This permit modification administratively extends the expiration date of the existing permit to June 30, 2003.

The permit modification described above and referred to as Appendix "B" is hereby approved. This appendix to the permit is incorporated into and constitutes a part of Permit No. LA-000007-02. This appendix must be attached to the permit. The permit is incomplete and unlawful under the Wastewater-Land Application Permit Regulations without this appendix attached.

Signed,

Charles W. Chies for SEN

BOISE REGIONAL ADMINISTRATOR

IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY

6/27/02

DATE

## Standard Permit Conditions: Procedures and Reporting

- 1. The permittee shall at all times properly maintain and operate all structures, systems, and equipment for treatment, operational controls and monitoring, which are installed or used by the permittee to comply with all conditions of the permit or the Wastewater-Land Application Permit Regulations, in conformance with a DEQ approved, current Plan of Operations (Operations and Maintenance Manual) which describes in detail the operation, maintenance, and management of the wastewater treatment system. This Plan of Operations shall be updated as necessary to reflect current operations.
- 2. Wastewater(s) or recharge waters applied to the land surface must be restricted to the premises of the application site unless permission has been obtained from the DEQ authorizing a discharge into the waters of the State as stated in IDAPA 58.01.02.600.02.
- 3. Wastewater must not create a public health hazard or nuisance condition as stated in IDAPA 58.01.02.600.03. In order to prevent public health hazards and nuisance conditions the permittee shall:
  - a. Apply wastewater as evenly as practicable to the treatment area;
  - b. Prevent organic solids (contained in the wastewater) from accumulating on the ground surface to the point where the solids putrefy or support vectors or insects; and
  - c. Prevent wastewater from ponding in the fields to the point where the ponded wastewater putrefies or supports vectors or insects.
- 4. As a result of land application of wastewater, ground water of the state must not contain contaminants exceeding those values as referenced under IDAPA 58.01.11.200a, b, and c of the <u>Ground Water Quality Rule</u>, unless otherwise specified in this permit.
- 5. The permittee shall:
  - a. Manage the wastewater land application treatment site as an agronomic operation where vegetative cover is grown and harvested to utilize the nutrients and minerals in the wastewater, and,
  - b. Not hydraulically overload any particular areas of the wastewater land application treatment site.
- 6. All waste solids, including dredgings and sludges, shall be utilized or disposed in a manner which will prevent their entry, or the entry of contaminated drainage or leachate therefrom, into the waters of the state such that health hazards and nuisance conditions are not created; and to prevent impacts on designated beneficial uses of the ground water and surface water. The permittee's management of waste solids shall be governed by the terms of the DEQ approved Waste Solids Management Plan, which upon approval shall be an enforceable portion of this permit.
- 7. If the permittee intends to continue operation of the permitted facility after the expiration of an existing permit, the permittee shall apply for a new permit at least six months prior to the expiration date of the existing permit in accordance with the Waste Water Land Application Permit Regulations.
- 8. The permittee shall allow the Director of the Idaho Department of Environmental Quality or the Director's designee (hereinafter referred to as Director), consistent with Title 39, Chapter 1, Idaho Code, to:
  - a. Enter the permitted facility,
  - b. Inspect any records that must be kept under the conditions of the permit.
  - c. Inspect any facility, equipment, practice, or operation permitted or required by the permit.
  - d. Sample or monitor for the purpose of assuring permit compliance, any substance or any parameter at the facility.
- 9. The permittee shall report to the Director under the circumstances and in the manner specified in this section:
  - a. In writing thirty (30) days before any planned physical alteration or addition to the permitted facility or activity if that alteration or addition would result in any significant change in information that was submitted during the permit application process.
  - b. In writing thirty (30) days before any anticipated change which would result in non-compliance with any permit condition or these regulations.

# Standard Permit Conditions: Procedures and Reporting (continued)

c. Orally within twenty-four (24) hours from the time the permittee became aware of any non-compliance which may endanger the public health or the environment at telephone numbers provided in the permit by the Director:

DEQ Boise Regional Office: 208-373-0550 Emergency 24 Hour Number 1-800-632-8000

- d. In writing as soon as possible but within five (5) days of the date the permittee knows or should know of any on-compliance unless extended by the DEQ. This report shall contain:
  - i. A description of the non-compliance and its cause;
  - ii. The period of non-compliance including to the extent possible, times and dates and, if the non-compliance has not been corrected, the anticipated time it is expected to continue; and
  - iii. Steps taken or planned to reduce or eliminate reoccurrence of the non-compliance.
- e. In writing as soon as possible after the permittee becomes aware of relevant facts not submitted or incorrect information submitted, in a permit application or any report to the Director. Those facts or the correct information shall be included as a part of this report.
- 10. The permittee shall take all necessary actions to prevent or eliminate any adverse impact on the public health or the environment resulting from permit non-compliance.
- 11. The permittee shall determine (on an on-going basis) if any noxious weed problems relate to the permitted sites. If problems are present, coordinate with the Idaho Department of Agriculture or the local County authority regarding their requirements for noxious weed control. Also address these control operations in an update to the Operations and Maintenance Manual.

### Standard Permit Conditions: Modifications, Violation, and Revocation

- 1. The permittee shall furnish to the Director within reasonable time, any information including copies of records, which may be requested by the Director to determine whether cause exists for modifying, revoking, re-issuing, or terminating the permit, or to determine compliance with the permit or these regulations.
- 2. Both minor and major modifications may be made to this permit as stated in IDAPA 58.01.17.700.01 and 02 with respect to any conditions stated in this permit upon review and approval of the DEQ.
- 3. Whenever a facility expansion, production increase or process modification is anticipated which will result in a change in the character of pollutants to be discharged or which will result in a new or increased discharge that will exceed the conditions of this permit, or if it is determined by the DEQ that the terms or conditions of the permit must be modified in order to adequately protect the public health or environment, a request for either major or minor modifications must be submitted together with the reports as described in G. Reporting Requirements, and plans and specifications for the proposed changes. No such facility expansion, production increase or process modification shall be made until plans have been reviewed and approved by the DEQ and a new permit or permit modification has been issued.
- 4. Permits shall be transferable to a new owner or operator provided that the permittee notifies the Director by requesting a minor modification of the permit before the date of transfer.
- 5. Any person violating any provision of the Waste Water Land Application Permit Regulations, or any permit or order issued thereunder shall be liable for a civil penalty not to exceed ten thousand dollars (\$10,000) or one thousand dollars (\$1,000) for each day of a continuing violation, whichever is greater. In addition, pursuant to Title 39, Chapter 1, Idaho Code, any willful or negligent violation may constitute a misdemeanor.
- 6. The Director may revoke a permit if the permittee violates any permit condition or the Wastewater Land Application Permit Regulations.
- 7. Except in cases of emergency, the Director shall issue a written notice of intent to revoke to the permittee prior to final revocation. Revocation shall become final within twenty (20) days of receipt of the notice by the permittee, unless within that time the permittee request an administrative hearing in writing to the Director.
- 8. The Director shall notify the permittee in writing of any revocation hearing at least twenty (20) days prior to the date set for such hearing. The hearing shall be conducted in accordance with Title 67, Chapter 52, Idaho Code.
- 9. If, pursuant to Idaho Code. 67-5247, the Director finds the public health, safety or welfare requires emergency action, the Director shall incorporate findings in support of such action in a written notice of emergency revocation issued to the permittee. Emergency revocation shall be effective upon receipt by the permittee. Thereafter, if requested by the permittee in writing the Director shall provide the permittee a revocation hearing and prior notice thereof. Such hearings shall be conducted in accordance with Title 67, Chapter 52, Idaho Code.
- 10. The provisions of this permit are severable and if a provision or its application is declared invalid or unenforceable for any reason, that declaration will not affect the validity or enforceability of the remaining provisions.
- 11. The permittee shall notify the DEQ at least six (6) months prior to permanently removing any permitted land application site from service. Prior to commencing site closure activities, the permittee shall: a) participate in a pre-site closure meeting with the DEQ; b) develop a site closure plan that identifies specific closure or cleanup tasks with scheduled task completion dates in accordance with agreements made at the pre-site closure meeting; and c) submit the completed site closure plan to the DEQ for review and approval within forty-five (45) days of the pre-site closure meeting. The permittee must complete the DEQ approved site closure plan.